

AMENDED CLAIMS

received by the International Bureau on 26 July 2005 (26.07 2005): original claims 26-31 have been replaced by amended claims 27-32

WE CLAIM:

1. A spinal and upper cervical impulse treatment device,
comprising:

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(a) a stand having a vertically oriented arm an upper end of
which is capable of being raised and lowered;

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(b) a horizontally oriented arm coupled to said vertically
oriented arm and moveable in an axial direction relative
to said vertically oriented arm, rotatable about its own
axis, and pivotal about an axis of said vertically
oriented arm; and

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(c) a spinal and upper cervical impulse treatment device
coupled to a distal end of said horizontally extending arm
and pivotal about an axis through its connection to said
horizontally extending arm, said spinal and upper cervical
impulse treatment device having a stylus extending from a
lower end thereof and said spinal and upper cervical
impulse treatment device operative to drive said stylus in
both a linear and rotational direction, a display means
for inputting stylus alignment information and for
displaying when the stylus is aligned with a patient.

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to claim 1, wherein said stylus is collapsible upon meeting resistance of a predetermined force value.

5 3. A spinal and upper cervical impulse treatment device according to claim 2, wherein said stylus has an inner sleeve slidable within an outer sleeve, said inner sleeve held in an extended position relative to said outer sleeve by biased friction couplings releasable upon application of a threshold force on said inner
10 sleeve relative to said outer sleeve.

4. A spinal and upper cervical impulse treatment device according to claim 3, wherein said biased friction couplings include a plurality of ball bearings biased against indents in the wall of
15 said stylus tube.

5. A spinal and upper cervical impulse treatment device according to claim 1, wherein said display is a touchscreen mounted on a top of said spinal and upper cervical impulse treatment device.

20 6. A spinal and upper cervical impulse treatment device according to claim 1, including a microprocessor programmed to recognize correct alignment and to permit operation to commence only when proper alignment is achieved.

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7. WO 2005/092269 A spinal and upper cervical impulse treatment device according to claim 1, including a linear voice coil actuator mounted to said stylus and operative to transmit sinusoidal impulse waveforms along the stylus linear axis. PCT/CA2005/000353

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8. A spinal and upper cervical impulse treatment device according to claim 1, including a second voice coil actuator mounted to said stylus and operative to transmit rotational sinusoidal impulse waveforms to said stylus.

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9. A spinal and upper cervical impulse treatment device according to claim 1, including an external computer coupled to said spinal and upper cervical impulse treatment device, said external computer for entering digitized data points relating to caliper measurements of aspects of the human body and transferring these data points from said external computer to said spinal and upper cervical impulse treatment device.

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10. A spinal and upper cervical impulse treatment device, comprising:

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(a) a stand having a vertically oriented arm an upper end of which is capable of being raised and lowered;

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(b) a horizontally oriented arm coupled to said vertically oriented arm and moveable in an axial direction relative to said vertically oriented arm, rotatable about its own axis,

and

(c) a spinal and upper cervical impulse treatment device
5 and controller coupled to a distal end of said horizontally
extending arm and pivotal about an axis through its connection
to said horizontally extending arm, said spinal and upper
cervical impulse treatment device having a stylus extending
from a lower end thereof and said spinal and upper cervical
10 impulse treatment device operative to drive said stylus in both
a linear and rotational direction, a display means for
inputting stylus alignment information and for displaying when
the stylus is aligned with a patient.

15 11. A spinal and upper cervical impulse treatment device according
to claim 10, wherein said stylus is collapsible upon meeting
resistance of a predetermined force value.

20 12. A spinal and upper cervical impulse treatment device according
to claim 10, wherein said stylus has an inner tube and an outer
sleeve, said outer sleeve having a plurality of ball bearings biased
against indents in the wall of said inner tube.

25 13. A spinal and upper cervical impulse treatment device according
to claim 10, wherein said display is a touchscreen mounted on a top
of said spinal and upper cervical impulse treatment device.

to claim 10, including a microprocessor programmed to recognize correct alignment and to permit operation to commence only when proper alignment is achieved.

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15. A spinal and upper cervical impulse treatment device according to claim 10, including a linear voice coil actuator mounted to said stylus and operative to transmit sinusoidal impulse waveforms along the stylus linear axis.

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16. A spinal and upper cervical impulse treatment device according to claim 10, including a second voice coil actuator mounted to said stylus and operative to transmit rotational sinusoidal impulse waveforms to said stylus.

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17. A spinal and upper cervical impulse treatment device according to claim 10, including an external computer coupled to said spinal an upper cervical impulse treatment device, said external computer for entering digitized data points relating to caliper measurements
20 of aspects of the human body and transferring these data points from said external computer to said spinal and upper cervical impulse treatment device.

18. A spinal and upper cervical impulse treatment device,

25 comprising:

having a stylus extending out therefrom, said stylus operative to receive signals from a controller, mounted on said spinal and upper cervical impulse treatment device,

5 when said stylus is in alignment with a patient causing said stylus to move both axially and rotationally, and a display on an exterior surface of said spinal and upper cervical impulse treatment device operative to receive signals from said controller and to display alignment, a transducer coupled to
10 said stylus operative to impart linear and rotational movement to said stylus; and

(b) a stand supportable from a support surface and having a coupling end couplable to said impulse controller and
15 display device with multiple degrees of freedom, enabling said impulse controller and display device to move in multiple directions so as to align said stylus with a patient on a bed proximate said impulse controller and display device.